A1 cont'd

range of the acceleration voltage between 400V and 1000V so that the emission efficiency of secondary electrons emitted from the surface may exceed 1.

Please replace the paragraph on page 27 lines 12–23 with the following:

A2

FIG. 10C shows the relationship between the beam scan position and the secondary electron amount. As is shown in FIG. 10C, the amount of secondary electrons increases in a region of the center position x1 of the underlying mark 104, where the surface potential is low, that is, in a region which is negatively charged. However, the amount of secondary electrons decreases in a region of the position x2 distanced from the center position x1 in the beam scan direction, where the surface potential is relatively high. The decreasing amount of secondary electrons are observed as a dark portion if they are detected by the detector 107 (not shown).

IN THE CLAIMS:

Please amend claims 6 and 16, and add new claims 23 and 24, as follows:

A3

6. (Amended) A pattern observation apparatus for observing a pattern by radiating a charged particle beam on a sample in which the pattern is formed on a substrate, the apparatus comprising:

a first beam radiation section for performing a first charged particle beam radiation on a sample in which a pattern is formed on a substrate and a surface of the substrate including the pattern is covered with an insulating film whose surface is flat including the pattern, and charging a surface of the sample;

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com